

Miller, Jesse

From: Straus, Matt
Sent: Thursday, February 20, 2014 11:10 AM
To: Miller, Jesse
Subject: FW: Additional Questions for Entsorga
Attachments: NIR Spectroscopy for PVC Removal.pdf; NRTCompanyOverview.pdf; SpydIR brochure.pdf

-----Original Message-----

From: Faison, George
Sent: Friday, November 01, 2013 11:35 AM
To: Straus, Matt
Cc: Devlin, Betsy; Elliott, Ross; Atagi, Tracy; Gerhard, Sasha
Subject: FW: Additional Questions for Entsorga

The second set of responses from Entsorga are included below.

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-----Original Message-----

From: Jonathan Birdsong [mailto:jbirdsong@bwstrategies.com]
Sent: Wednesday, October 09, 2013 10:48 AM
To: Spells, Charlene; Cozzie, David; Faison, George; Gerhard, Sasha
Subject: Additional Questions for Entsorga

Charlene, David, George and Sasha - Attached below are answers to your questions from the end of September.

1. EPA needs more information about the performance of the proposed NIR system to be used at the West Virginia plant. Is test data available that shows the effectiveness of the proposed NIR system at reducing the chlorine content of the waste which will be processed in West Virginia?

Entsorga will utilize NIR spectroscopy technology - specifically the NRT SpydIR (<http://www.nrtsorters.com/equipment/the-spydir/>). This technology will detect and eject 99% by weight of all non-black PVC materials from a waste stream. This technology is proven and in operation in over 15 states across the country including: California, Nevada, Colorado, Texas, Illinois, Georgia, Alabama, Utah, New Mexico, Oklahoma, Arkansas, Wisconsin, Ohio, North Carolina and Rhode Island. Data on the equipment's capabilities are attached.

2. Can Entsorga regulate the moisture content to be held at 15% consistently? What is the process to keep that consistency?

Yes - A unique proprietary characteristic of Entsorga Hebiot MBT biological treatment step is that forced air is alternatively blown into and sucked from the waste piles (zone by zone), creating the so called "reverse-flow bio-reactor". This is a strong differentiator of the Entsorga MBT process in comparison to other available MBT processes providing numerous process efficiencies.

The "reverse-flow" system enables Entsorga to control the moisture and bio-degradation more uniformly through the cross section of the waste pile and improve bio-stabilisation rates. As a result it can achieve lower moisture contents in shorter time compared to other existing MBT processes, thus improving overall process efficiency, allowing to produce a homogenous fuel conforming to the tight specifications of the final users.

The moisture of the material is continuously controlled by means of moisture evaluation software that gives an indication of the drying level of the waste and maximize the decay. The software estimates the moisture level by applying a complex algorithm which relies on the values of temperature, humidity and flow rate of the air extracted from the waste mass. When the stabilizing mass has reached the expected level of moisture reduction (~15%), the drying process stops.

3. What are the measures to ensure consistency/homogeneity on a day-to-day and batch to batch basis? How does Entsorga intend to monitor this?

The waste treatment is a full process lasting up to 14 days and employing both mechanical and biological treatment under strict continuous monitoring by an automated system supporting the operators.

A SRF Quality Management System will be implemented at the facilities in order to constantly control the fuel characteristics and its conformity to the needs and specifications required by the users. On a daily basis, an automated sampling device will extract representative SRF samples from the production stream to be analyzed according to the Monitoring Plan in order to control a wide array of potential pollutants and to verify SRF quality and environmental safety.

The Monitoring and Analysis Plan (MAP) is defined by the Technical Direction (Quality and Environment) in agreement with the Laboratory Direction. The MAP is issued in the plant Intranet and is annually revised to ensure highest quality. An example of a MAP that would be used for the Martinsburg facility can be found on pp. 23-24 of the material Entsorga submitted to the EPA on 3/15/2013.

4. Verify that Entsorga will only be using black bag material (i.e. no chemical inputs). - Answer YES - only black bag material.

5. Provide a picture of the SRF. (Provided earlier)

Thanks and please let me know if you have any additional questions or comments. I will adjust my schedule for any other meetings/calls that you would like to have.

Sincerely,

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